

## 6291.0.55.001 - Labour Force, Australia, Detailed - Electronic Delivery, Feb 2015

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## Summary

### Main Features

Data from the monthly Labour Force Survey are released in two stages. The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) are part of the second release, and include detailed data not contained in the Labour Force, Australia (cat. no. 6202.0) product set, which is released one week earlier.

The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) is released monthly. Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) includes data only collected in February, May, August and November (including industry and occupation).

Since these products are based on the same data as the Labour Force, Australia (cat. no. 6202.0) publication, the 6202.0 Labour Force, Australia Explanatory Notes are relevant to both releases.

## What's New in the Labour Force

### WHAT'S NEW IN THE LABOUR FORCE

#### REBENCHMARKING

The estimates in this issue have been rebenchmarked using population benchmarks based on the latest Estimated Resident Population. See the article, **Rebenchmarking Labour Force Estimates**, in *Labour Force, Australia* for further detail.

#### ANNUAL SEASONAL REANALYSIS

As advised in previous issues of *Labour Force, Australia*, the ABS will publish results of the annual seasonal reanalysis of Labour Force series with the March 2015 issue. This will revise seasonally adjusted and trend estimates for key Labour Force series to the commencement of the series in February 1978. While seasonal factors for the complete time series are estimated every month, they are reviewed annually at a more detailed level than is possible in the monthly processing cycle to ensure that the estimates are of the highest quality.

In response to the recent independent review into the Labour Force Survey, the ABS introduced prior corrections from the December 2013 reference month to account for the changed supplementary survey program. In addition, the ABS committed to reviewing these prior corrections and implementing relevant prior corrections over the entire series. This work will be undertaken as part of the annual seasonal reanalysis. As the supplementary survey program had been relatively stable prior to 2014, implementing prior corrections to earlier periods is generally not expected to have a significant impact on the series. The March 2015 issue will include information on the impact of the annual seasonal reanalysis, including the implementation and refinement of prior corrections for the supplementary survey program.

#### NEW LABOUR FORCE OUTPUTS

The ABS conducted a review in 2010-11 of content included in the labour household survey program and has been working towards introducing a range of new Labour Force outputs. The introduction of the new outputs has been delayed with priority given to investigations into recent Labour Force results, implementation of regular quarterly rebenchmarking, the upcoming annual seasonal reanalysis and to ensure that testing of the system producing the new outputs is comprehensive. While the timing for introducing the new outputs is yet to be finalised, the ABS is working towards an implementation with the April 2015 issues (released in May 2015) for monthly outputs including the detailed monthly release (cat. no. 6291.0.55.001) and the May 2015 issue (released in June 2015) for quarterly data. The ABS will either confirm or provide a further update on the release of the new Labour Force outputs in the March 2015 issue of this publication. In the meantime the existing outputs will continue to be produced for the February and March 2015 issues of this and related publications but will cease when the new outputs are introduced.

Blank templates for the new Labour Force outputs were released in October 2014 attached to the **Information Paper: Forthcoming Changes to Labour Force Statistics, October 2014** (cat. no. 6292.0). These templates still reflect the planned new outputs and are available to assist clients to prepare for the changed outputs. Clients who rely on the Labour Force spreadsheets and data cubes are encouraged to use the templates to ensure that their processes can continue to access the correct data once the new outputs are implemented.

## Rebenchmarking Labour Force Estimates

### REBENCHMARKING LABOUR FORCE ESTIMATES

#### INTRODUCTION

There are two key inputs used in compiling Labour Force estimates:

- measure of the population potentially available to the labour force (i.e. the civilian population aged 15 years and over), referred to as population benchmarks; and
- labour force status of people in the population (i.e. being employed, unemployed or not in the labour force) based on data collected in the monthly Labour Force Survey (LFS).

This article describes revisions made to Labour Force estimates as a result of the population benchmarks being rebenchmarked (updated) to include the latest information from the Estimated Resident Population (ERP) as released in Australian Demographic Statistics, Jun 2014 (cat. no. 3101.0).

This article:

- provides background to the rebenchmarking of the Labour Force estimates;
- details the process for maintaining the population benchmarks;

- provides an update on the impact of the delayed release of Overseas Arrival and Departures data;
- summarises the impact on key Labour Force series.

## BACKGROUND TO REBENCHMARKING

ABS population benchmarks are based on the ERP which reflects data from the Census of Population and Housing adjusted for under-enumeration, and updated for births, deaths, interstate migration and net overseas migration. As Labour Force estimates cover the civilian population aged 15 years and over, the civilian population aged under 15 years and permanent defence personnel are deducted from ERP to create the Labour Force population benchmarks.

Labour Force estimates for the most recent months are released prior to the availability of the relevant ERP. For example, for the February 2015 Labour Force issue, the latest ERP currently available is for June quarter 2014. This lag is due to the time needed to compile the component data for the ERP, namely the overseas and interstate migration, births, and deaths. Of these components, net overseas migration (NOM) is generally the main driver of change in ERP estimates and therefore is explained further. Estimating NOM, and thereby Australia's official ERP count, is based on an international traveller's duration of being in or out of Australia. The ABS employs a '12/16 month rule' where the traveller can be added to, or subtracted from, NOM if they have stayed in, or been absent from, Australia for a period of 12 months or more, over a 16-month period. This 12 month period does not have to be continuous. Travellers who arrive in Australia for a holiday or a short stay are not counted as part of the resident population and conversely those who leave for short periods are not excluded.

The population benchmarks used to compile Labour Force estimates can take on one of four statuses, depending on the availability of the components of ERP. These statuses indicate the quality of the components at a particular point in time, and hence the benchmarks. The population benchmarks used in the estimates presented in this issue can be used to demonstrate how NOM determines the quality of the benchmarks:

- Final benchmarks: After the rebasing of ERP to the 2011 Census, benchmarks for the period from Sep 2006 to June 2011 are considered final. NOM, and hence benchmarks, for these periods will not change again.
- Revised benchmarks: This benchmark is calculated from a revised set of components that include final NOM estimates which fully apply the '12/16 month rule'. A traveller's actual duration of stay can be calculated when data on overseas movements are available after 16 months. In this issue, for example, travellers who arrived in Australia for the first time in March 2013 were monitored by their departures from and arrivals back into Australia up until July 2014 (the 16 month window), at which point their total time spent in Australia was assessed and, if exceeding 12 months, they were added to NOM.
- Preliminary benchmarks: This benchmark contains preliminary NOM estimates that uses travellers' modelled behaviour and declared intentions of stay since not enough time has elapsed for the '12/16 month rule' to be applied. Travellers who arrived for the first time in June 2014 will be monitored until October 2015 (the 16 month window) to determine if they will satisfy the '12/16 month rule'.
- Projected benchmarks: In this issue, benchmarks are based on projected population for July 2014 onwards since official preliminary ERP is not yet available. These projections make assumptions of component growth including using the NOM forecasts provided by the Department of Immigration and Border Protection.

Rebenchmarking ensures that the Labour Force estimates are based on the most up-to-date population information. Quarterly rebenchmarking will ensure that short-term projections and preliminary ERP included in the population benchmarks for the most recent periods are regularly replaced by more reliable information. Quarterly rebenchmarking does not generally result in any material change to unemployment rates, participation rates or employment to population ratios at the national or state and territory level. Changes to the population benchmarks impact primarily on the level of the Labour Force estimates (i.e. employed, unemployed and not in the labour force) that are directly related to the underlying size of the population. Changes in population composition such as age, sex or region (as used in the population benchmarks) may result in a different rate of change especially at finer levels of geography. The impact of the current rebenchmarking is described later in this article.

## MAINTAINING THE LABOUR FORCE POPULATION BENCHMARKS

The section above describes how over time preliminary ERP estimates are replaced by revised ERP as the 16 month window closes on individuals, and short-term forecasts are replaced by preliminary ERP estimates. This results in continual revision of the estimated resident population, not just for the most recent month but also back throughout the last 25 months.

To ensure that Labour Force series maintain coherence with the latest ERP estimates, the ABS announced in the November 2012 issue of this publication that it would introduce a process of regular rebenchmarking to introduce the latest revised Labour Force population benchmarks. From this issue, February 2015, the population benchmarks will be revised quarterly (in the February, May, August and November issues) with estimates revised for the previous 25 months. This will ensure that the Labour Force population benchmarks are updated with the most recent ERP information available.

The table below shows:

- That after the rebenchmarking in this issue, estimates up to March 2013 will be based on revised ERP and therefore not further revised in the regular rebenchmarking (until the rebasing following the 2016 Census).
- That in future issues, Labour Force population benchmarks and therefore Labour Force estimates will be revised quarterly for the previous 25 months, with the earliest three months revised for the last time until the next Census. For example in the May 2015 issue, the data for April, May and June 2013 will be based on revised ERP and therefore not further revised in the regular rebenchmarking.
- Initial Labour Force estimates for the most recent periods will continue to be based on Labour Force population benchmarks that project forward between eight and 10 months past the most recent preliminary ERP estimate to the current period and incorporate NOM forecasts provided by the Department of Immigration and Border Protection.

Table 1: Progressive status of Estimated Resident Population in Labour Force Benchmarks by publication issue

Month	Reference Quarter																																			
	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-14	Dec-14	Mar-15	Jun-15																
Feb-15	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
Mar-15																																				
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May-15																																				
Jun-15																																				
Jul-15																																				
Aug-15																																				
Sep-15																																				
Oct-15																																				

Revised ERP

Prelim ERP

Projection

Published Issue

Not yet available

As this issue introduces the first benchmarking revision since the January 2014 issue, it updates population benchmarks back to July 2011 i.e. 44 months rather than the 25 months that will occur with regular quarterly rebenchmarking. The revisions to July 2011 are broken down as follows:

- July 2011 to March 2012 - introduction of revised ERP with revisions to replace state migration factors based on the 2006 Census with factors from the 2011 Census. This period will not be further revised in the regular rebenchmarking (until the rebasing following the 2016 Census).
- April 2012 to March 2013 - revisions from preliminary ERP to revised ERP and therefore will not be further revised in the regular rebenchmarking (until the rebasing following the 2016 Census).
- April 2013 to June 2013 - revisions from an older preliminary ERP (as at January 2014) to the most recent preliminary ERP.
- July 2013 to June 2014 - revisions from projected population estimates to preliminary ERP.
- July 2014 to January 2015 - updated projected population estimates, incorporating latest NOM forecasts from the Department of Immigration and Border Protection.

Protection.

Table 2: Status of Estimated Resident Population in Labour Force Benchmarks at the January 2015 issue

Reference Quarter																									
Month		Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-14	Dec-14	Mar-15	Jun-15				
Jan-15		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
		Revised ERP (2006 interstate factors)				Prelim ERP				Projection				Published Issue				Not yet available							

## DELAY IN RELEASE OF OVERSEAS ARRIVALS AND DEPARTURES STATISTICS

The release of Overseas Arrivals and Departures, Australia (cat. no. 3401.0) for the period October 2014 to April 2015 will be delayed. The delay is due to passenger card processing issues as announced by the Department of Immigration and Border Protection (DIBP). This delay does not impact on the calculation of Labour Force population benchmarks used in the rebenchmarking undertaken for this issue, as only preliminary ERP up to June 2014 is incorporated with subsequent months based on projections. The ABS and the Department are working closely together to manage the issues and to minimise delays to the preparation of these statistics. Further advice will be provided if these delays impact on Labour Force benchmarks.

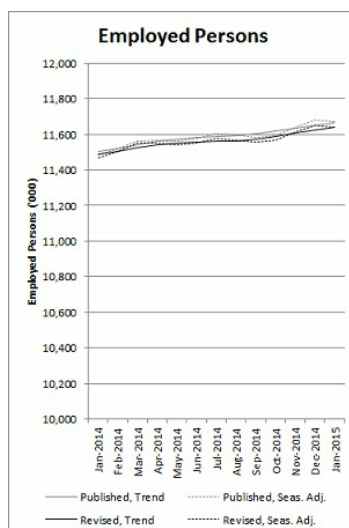
## IMPACT OF REBENCHMARKING ON KEY LABOUR FORCE ESTIMATES

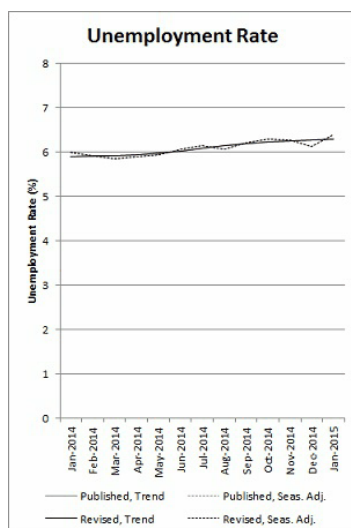
The introduction of the revised population benchmarks does not involve any change to the unit record data collected in the LFS. Changes to the population benchmarks impact primarily on the level of the Labour Force estimates (i.e. employed, unemployed and not in the Labour Force) that are directly related to the underlying size of the population. Changes in population composition such as age, sex or region (as used in the population benchmarks) may result in a different rate of change especially at finer levels of geography. Rebenchmarking does not generally result in any material change to unemployment rates, participation rates or employment to population ratios at the national or state and territory levels. The following table shows the impact of rebenchmarking on key trend and seasonally adjusted estimates for December 2014 and January 2015 as published in the January 2015 issue. The estimates are prior to the incorporation of data for February 2015 which may result in the usual revisions observed with concurrent seasonal adjustment. This shows that for the most recent months, rebenchmarking has had minimal impact on the key level estimates and negligible impact on the rates.

### JANUARY 2015 REVISED KEY FIGURES

	Published	Revised	Dec 2014 Difference	Published	Revised	Jan 2015 Difference	Published	Revised	Dec 14 to Jan 15 Difference	Published	Revised	Jan 14 to Jan 15 Difference
Trend												
Employed persons ('000)	11650.8	11622.5	-28.2	11666.0	11637.4	-28.6	15.2	14.9	-0.3	0.0	0.0	-0.1 pts
Unemployed persons ('000)	778.7	777.3	-1.4	782.3	780.9	-1.5	3.6	3.5	-0.1	0.1	0.1	-0.2 pts
Unemployment rate (%)	6.3	6.3	0.0	6.3	6.3	0.0	0.0 pts	0.0 pts	0.0 pts	0.4 pts	0.4 pts	0.0 pts
Participation rate (%)	64.7	64.7	0.0	64.7	64.7	0.0	0.0 pts	0.0 pts	0.0 pts	0.1 pts	0.1 pts	0.0 pts
Aggregate Monthly Hours Worked (Mh)	1603.7	1599.2	-4.5	1604.4	1599.7	-4.7	0.7	0.5	-0.1	0.0	0.0	-0.1 pts
Seasonally Adjusted												
Employed persons ('000)	11680.9	11650.7	-30.2	11668.7	11641.1	-27.6	-12.2	-9.5	2.6	0.0	0.0	-0.1 pts
Unemployed persons ('000)	760.7	758.9	-1.8	795.2	793.7	-1.4	34.5	34.9	0.4	0.1	0.1	-0.1 pts
Unemployment rate (%)	6.1	6.1	0.0	6.4	6.4	0.0	0.3 pts	0.3 pts	0.0 pts	0.4 pts	0.4 pts	0.0 pts
Participation rate (%)	64.8	64.7	0.0	64.8	64.8	0.0	0.0 pts	0.0 pts	0.0 pts	0.2 pts	0.2 pts	0.0 pts
Aggregate Monthly Hours Worked (Mh)	1599.4	1594.9	-4.5	1607.6	1602.5	-5.1	8.2	7.6	-0.6	-0.2%	-0.3%	-0.1 pts

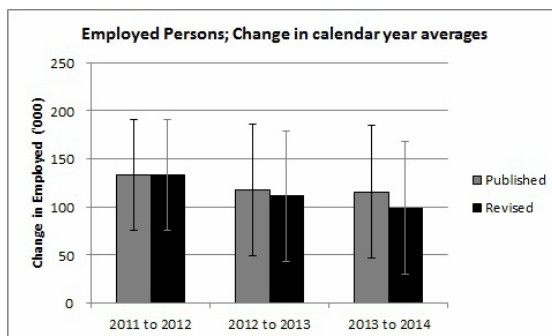
The following charts show the impact of the rebenchmarking over a longer period. While there is an impact on the level of employed persons and the unemployment rate, the extent of the change is relatively constant or evolves gradually and in percentage terms is relatively small.



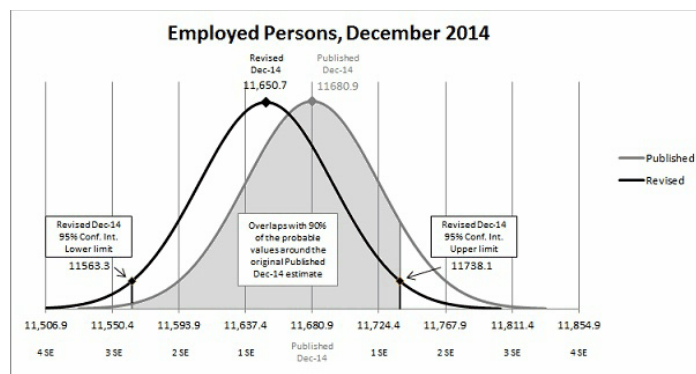


#### CALENDAR YEAR 2014 AVERAGE KEY FIGURES

Seasonally Adjusted	Published	Revised	2013 Difference	'Published	Revised	2014 Difference	Published	Revised	2013 to 2014 Difference
Employed persons ('000)	11 464.6	11 458.4	-6.2	11 580.4	11 557.5	-22.9	115.8	99.1	-16.7
Unemployed persons ('000)	688.1	688.0	-0.1	746.7	745.8	-0.1	58.6	57.8	-0.9



The largest revision at the Australian level was a downward shift of 30,200 (or 0.26%) employed persons in December 2014, from the published estimate of 11.68 million to the revised 11.65 million. The normal distribution of probable 'real world' values around each of these estimates overlap to an extent that each is within the range of one standard error of each estimate (about 70% of one standard error). When considering the 95% confidence interval around the new revised estimate of 11.65 million for December 2014 (11.56 to 11.74 million), this range overlaps with 90% of the probable values originally covered by the distribution around the previously published estimate of 11.68 million (see graph below). This illustrates that both the original and revised estimates are providing similar profiles of possible 'real world' values for the number of employed persons in Australia. This is consistent with the sample survey approach to estimation - even though the value of the estimate has changed due to revised population benchmarks, the underlying responses that divide the population into employed, unemployed or not in the labour force have not changed, and should not impact on any conclusions based on the estimates.



#### FUTURE REBENCHMARKING

This article has described the rebenchmarking of Labour Force estimates to the latest available population benchmarks. As anticipated this has not resulted in any material change to unemployment rates, participation rates or employment to population ratios at the national or state and territory levels. Rebenchmarking will continue on a quarterly basis commencing with the May 2015 issue with revisions for the previous 25 months rather than the 44 months on this occasion.

#### FURTHER INFORMATION

For any queries regarding the implementation of any of these changes to the Labour Force series contact Labour Force Estimates on Canberra 02 6252 6525, or via email at [labourforce@abs.gov.au](mailto:labourforce@abs.gov.au).

## Online Collection in the Labour Force Survey

#### ONLINE COLLECTION IN THE LABOUR FORCE SURVEY

## INTRODUCTION

Households selected in the ABS's Labour Force Survey traditionally responded through a telephone or face-to-face interview but from December 2012 the option of responding through an online questionnaire was introduced to provide respondents with greater choice and to ensure that data collection remains cost-effective. This note provides information on the take up rate of the online questionnaire.

## BACKGROUND

From December 2012 to April 2013, the ABS conducted a trial of online data collection. During this time, respondents in one rotation group (i.e. one-eighth of the survey sample) were offered the option of self completing their Labour Force Survey questionnaire online instead of via a telephone or face-to-face interview. From May 2013, the ABS expanded the offer of online collection to 50% of each new incoming rotation group. This coincided with the introduction of the current sample, based on the 2011 Census of Population and Housing. From September 2013, online collection has been offered to 100% of private dwellings in each incoming rotation group and by April 2014, 100% of private dwellings were being offered online collection. Interviewer collection (both telephone and face-to-face) continues to be available for those respondents where online self completion is inappropriate for operational, technological or personal reasons.

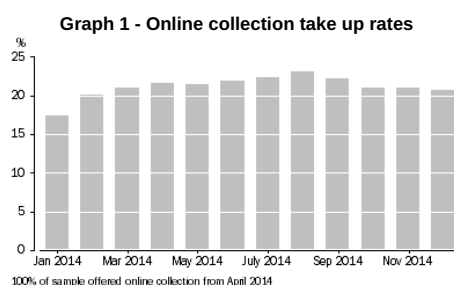
The ABS used the initial trial of offering online data collection to one rotation group and the progressive introduction of the offer to other rotation groups, to measure the impact on the Labour Force series of the move to online self completion. Statistical analysis during this period concluded there was no evidence of any reporting bias due to the introduction of online questionnaires. However, the analysis could not rule out that some small impact may be present, as the sample of online reporters was not sufficiently large to detect if there were any small impacts. Ongoing monitoring and analysis of online responses has not identified a significant impact from the move to online self completion.

## CURRENT COLLECTION PROCEDURES

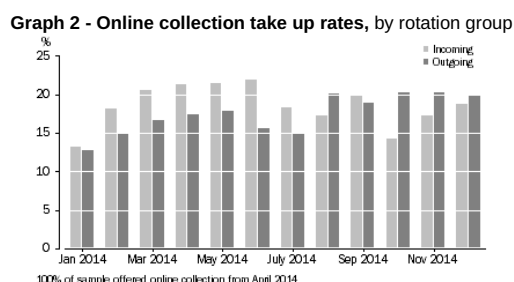
Households selected in the Labour Force Survey are sent a letter and brochure informing them that they have been selected to participate in the survey. Since February 2014, survey respondents are asked to use the unique user name and password provided in the letter to register an email address and other contact details for the household, or to contact the ABS if they are unable to participate in the survey online. A notification is then sent to respondents who have registered their contact details electronically to advise that the survey questionnaire is available for completion online within a specified one week period. Respondents who are unable to participate in the survey online, along with respondents who register contact details for the household electronically but do not complete the survey questionnaire online within the specified one week period, are subsequently contacted by an ABS interviewer to complete the survey questionnaire either via telephone or face-to-face. This represents an "opt out" approach to online data collection, and encourages survey participants to complete the survey online where possible at a time which is convenient to them.

## ONLINE COLLECTION TAKE UP

Chart 1 shows that online collection take up rates in aggregate were very consistent across 2014. The lowest take up rate during 2014 was 17.4% in January (when only 81% of the sample was offered the online option), with the highest at 23.2% in August. The average take up rate for 2014 was 21.1%. This compares to the 2013 average take up rate of 17.5% of those offered an online option. The ABS is continuing to explore options for making online collection a more attractive option for households.



The sample is divided into eight distinct sub-samples, or rotation groups, with each sub-sample remaining in the survey for eight months. A new rotation group is introduced each month to replace an outgoing rotation group. This replacement sample generally comes from the same geographic area as the outgoing one. Chart 2 shows that online collection take up rates varied somewhat between incoming and outgoing rotation groups during 2014. The largest absolute difference in take up rates was seen in June, with the take up rate for the incoming rotation group 6.3 percentage points higher than for the outgoing rotation group. The difference in the take up rate between an outgoing and incoming rotation group is one cause of the variation in month to month take up rates shown in Chart 1.



The sample can also be thought of as comprising sub-samples based in each capital city and the rest of each state. For the period April 2014 (when the online option commenced being offered to 100% of the sample) to December 2014, the combined online collection take up rates for capital cities were consistently higher than those for the combined rest of states (refer Chart 3). The largest difference in take up rates was seen in April 2014 where the combined capital cities rate was 6.5 percentage points higher than that for the combined rest of states. From April to December 2014 the average take up rate for the combined capital cities was 22.8% and 19.3% for the combined rest of states.

**Graph 3 - Online collection take up rates, by Capital city/ Rest of State**

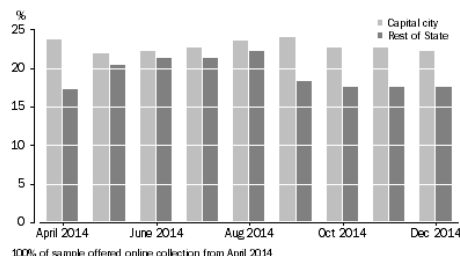
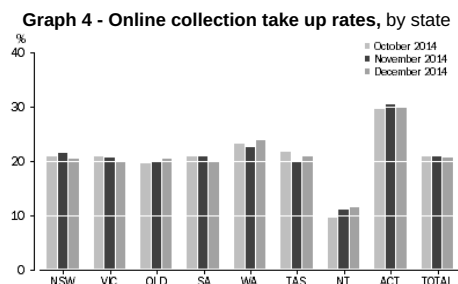
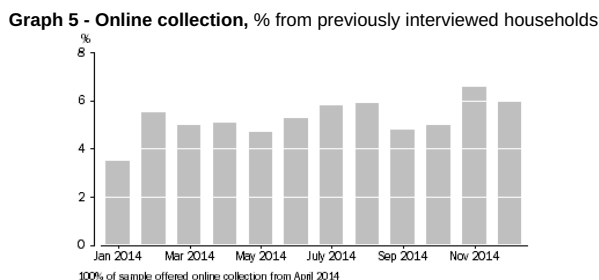


Chart 4 shows that average online collection take up rates for each state for the period October to December 2014 were fairly consistent with the highest take up rate seen in Western Australia (at 23.3%) and the lowest in Queensland (at 20.0%). This contrasted with results for each territory, which varied most from the national average of 20.9% for these three months. The average take up rate for the same period for the Northern Territory was 10.8% (noting that online data collection was not offered to sample in Aboriginal and Torres Strait Islander communities and very remote areas), while the take up rate for the Australian Capital Territory was 30.0%.



Survey respondents who complete their survey with the help of a trained interviewer in a month are still able to use online collection for any subsequent month in the survey. Chart 5 shows of those survey respondents who completed their survey with the help of an ABS interviewer in the previous month, the proportion who used online collection in the following month. For example, of those survey respondents who completed their survey with the help of an ABS interviewer in November 2014, 6% subsequently completed the questionnaire online in December 2014.



A further update on the take up of the online completion of the Labour Force questionnaire will be provided every six months in this publication. It is intended that the next update will include information on the characteristics of online respondents (e.g. Labour Force status, age, gender).

## Article Archive

This section provides an archive of articles and analysis published in Labour Force, Australia (cat. no. 6202.0), promoting the effective use of labour force statistics. Articles are sorted by publication date.

Articles on labour related topics are also available in Australian Labour Market Statistics (cat. no. 6105.0) and Australian Social Trends (cat. no. 4102.0).

### Labour Force Survey Archive

What's new in the Labour force January 2015

What's new in the Labour force December 2014

Independent Technical Review into the Labour Force Survey and ABS Response November 2014

What's new in the Labour force November 2014

Removing the effect of Supplementary Surveys from seasonally adjusted estimates  
 Changes in this and upcoming labour force issues  
 Changes in this and upcoming labour force issues  
 What's new in the Labour force  
 What's new in the Labour force  
 What's new in the Labour force  
 What's new in the Labour force  
 What's new in the Labour force  
 Rebenchmarking Labour Force Estimates to the 2011 Census of Population and Housing  
 What's new in the Labour force  
 Understanding the Australian Labour Force using ABS statistics  
 What's new in the Labour Force  
 Understanding full-time/part-time status in the Labour Force Survey  
 What's new in the Labour Force  
 Fact sheet did you know - Underemployment  
 What's new in the Labour Force

October 2014  
 September 2014  
 August 2014  
 July 2014  
 June 2014  
 May 2014  
 February 2014  
 January 2014  
 December 2013  
 December 2013  
 November 2013  
 September 2013  
 September 2013  
 June 2013  
 June 2013

New Labour Force Sample Design	May 2013
Annual Seasonal Reanalysis	May 2013
What's new in Labour Force	May 2013
Transition to online collection of the Labour Force Survey	April 2013
What's new in Labour Force	April 2013
Estimating Jobs in the Australian Labour Market	February 2013
Forthcoming improvements to the content of the Labour Force and Labour Supplementary Surveys	January 2013
What's new in Labour Force	January 2013
Understanding the Australian Labour Force using ABS statistics	January 2013
Rebenchmarking of Labour Force Series	November 2012
Upcoming changes to the Labour Force Survey	July 2012
Labour Household Surveys content review and the Labour Force Survey	June 2012
Employment and mining in Queensland, New South Wales and Western Australia	May 2012
ABS Response to recent concerns expressed about employment estimates	April 2012
Population Benchmarks and Labour Force Survey	April 2012
Annual Seasonal Reanalysis	March 2012
Exploring Labour Force Data on joblessness	February 2012
Employment level estimates versus employment to population explained	January 2012
Understanding the Australian Labour Force using ABS statistics	November 2011
Historical Revisions	February 2011
Impact of the floods on the Labour Force Survey	January 2011

## About this Release

A range of Excel spreadsheets and SuperTABLE datacubes. The monthly spreadsheets contain broad level data covering all the major items of the Labour Force Survey in time series format, including seasonally adjusted and trend estimates. The monthly datacubes contain more detailed and cross classified original data than the spreadsheets.

## Explanatory Notes

### Explanatory Notes

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## Quality Declaration - Summary

### QUALITY DECLARATION - SUMMARY

#### INSTITUTIONAL ENVIRONMENT

Labour Force statistics are compiled from the Labour Force Survey which is conducted each month throughout Australia as part of the Australian Bureau of Statistics (ABS) household survey program. For information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

#### RELEVANCE

The Labour Force Survey provides monthly information about the labour market activity of Australia's resident civilian population aged 15 years and over. The Labour Force Survey is designed to primarily provide estimates of employment and unemployment for the whole of Australia and, secondarily, for each state and territory.

#### TIMELINESS

The Labour Force Survey enumeration begins on the Sunday between the 5th and 11th of the month, except for the Christmas and New Year holiday period. In December enumerations starts between the 3rd and 9th (4 weeks after November enumeration begins). In January enumeration starts between the 7th and 13th (5 weeks after December enumeration begins).

Key estimates from the Labour Force Survey are published in two stages. The first, Labour Force, Australia (cat. no. 6202.0), is released 32 days after the commencement of enumeration for the month, with the exception of estimates for December which are published 39 days after the commencement of enumeration.

The second stage includes detailed data that were not part of the first stage and are published in Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003). The second stage is released 7 days after the first stage.

#### ACCURACY

The Labour Force Survey is based on a sample of private dwellings (approximately 26,000 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.32% of the Australian civilian population aged 15 years or over. The Labour Force Survey is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each state and territory.

Two types of error are possible in an estimate based on a sample survey: non-sampling error and sampling error.

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because

information cannot be obtained from all persons selected in the survey. The Labour Force Survey receives a high level of cooperation, with an average response rate for the last year being 94%.

Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors.

Standard errors of key estimates and movements since the previous month are available in Labour Force, Australia (cat. no. 6202.0). The standard error of other estimates and movements may be calculated by using the spreadsheet contained in Labour Force Survey Standard Errors, Data Cube (cat. no. 6298.0.55.001).

## COHERENCE

The ABS has been conducting the Labour Force Survey each month since February 1978. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

The changes which have been made to the Labour Force Survey have included changes in sampling methods, estimation methods, concepts, data item definitions, classifications, and time series analysis techniques. In introducing these changes the ABS has generally revised previous estimates to ensure consistency and coherence with current estimates. For a full list of changes made to the Labour Force Survey see Chapter 20 in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001).

## INTERPRETABILITY

The key estimates from the Labour Force Survey are available as original, seasonally adjusted and trend series. Seasonal adjustment is a means of removing the effects of normal seasonal variation from the series so other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove the irregular influences which may be present and therefore month-to-month movements may not be reliable indicators of underlying behaviour. To assist in interpreting the underlying behaviour, the ABS produces the trend series by smoothing the seasonally adjusted series to reduce the impact of the irregular component. For further information, see A Guide to Interpreting Time Series - Monitoring Trends (cat. no. 1349.0).

Further information on the terminology and other technical aspects associated with statistics from the Labour Force Survey can be found in the publication Labour Force, Australia (cat. no. 6202.0), which contains detailed Explanatory Notes, Standard Error information and a Glossary.

## ACCESSIBILITY

Please see the Related Information tab for the list of products that are available from this collection.

## Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

Data relating to unemployed persons looking for first full-time job is not available from July 2014. As highlighted in the Information Paper: Forthcoming Changes to Labour Force Statistics (cat. no. 6292.0), duration of unemployment since last full-time job is no longer collected in the Labour Force Survey questionnaire from July 2014. As this information is used, in part, to identify whether a currently unemployed person has been employed full-time in the past, unemployed persons looking for first full-time job is no longer able to be derived on a comparable basis and is therefore not available. This specific series had been highlighted to be removed with the introduction of new labour force outputs, but this has been brought forward.

## Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

Data relating to unemployed persons looking for first full-time job is not available from July 2014. As highlighted in the Information Paper: Forthcoming Changes to Labour Force Statistics (cat. no. 6292.0), duration of unemployment since last full-time job is no longer collected in the Labour Force Survey questionnaire from July 2014. As this information is used, in part, to identify whether a currently unemployed person has been employed full-time in the past, unemployed persons looking for first full-time job is no longer able to be derived on a comparable basis and is therefore not available. This spreadsheet had been highlighted to be removed with the introduction of new labour force outputs.

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## Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

As part of the Labour Force change program the ABS has made changes to the standard for Status in Employment and the new questionnaire introduced in July no longer allows persons to be classified according to the old standard. Specifically it is no longer possible to classify persons who work for a commission without a retainer on a consistent basis with the old questionnaire. The changes to the questionnaire came into effect from July 2014, however the changes to the output will not be incorporated until the release of new Labour Force outputs. The main changes to the standard involve new groups for Owners/Managers of Incorporated Enterprises, and a small change to the definition of employees to include persons paid by commission without a retainer. Previously persons working for a commission without a retainer were classified as either Employers or Own Account Workers. With the change to the questionnaire, it is not possible to assign this group to the appropriate category in the current standard due to questionnaire sequencing. Persons who worked for a commission without a retainer have been classified to the appropriate category in the current standard based on the distribution in the corresponding month in 2013. When the first lot of new content is introduced the entire series will be revised to be consistent with the revised standard back to 1991.

## Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions. The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to



normal. Refer to the article Impact of the floods on the Labour Force Survey in January 2011 for more information.

The new labour force sample was phased-in over four months from May to August 2013. See the article on page 10 of the May 2013 issue of Labour Force, Australia (cat. no. 6202.0) for more information. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

## Data Cubes (I-Note) - Data Cubes

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions. The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article Impact of the floods on the Labour Force Survey in January 2011 for more information.

The new labour force sample was phased-in over four months from May to August 2013. See the article on page 10 of the May 2013 issue of Labour Force, Australia (cat. no. 6202.0) for more information. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

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The new labour force sample was phased-in over four months from May to August 2013. See the article on page 10 of the May 2013 issue of Labour Force, Australia (cat. no. 6202.0) for more information. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

## Standard Errors

Estimates from the Labour Force Survey (LFS) are based on information collected from people in a sample of dwellings, rather than the entire population. Hence the estimates produced may differ from those that would have been produced if the entire population had been included in the survey. The most common measure of the likely difference (or 'sampling error') is the **standard error** (SE).

The ABS considers that estimates with a relative standard error of 25% or more may be subject to sampling variability too high for most practical purposes.

To determine if an item has a relative standard error of 25% or more, in SuperTABLE, right click in the centre of the table, select annotate cells - standard annotations, and select 'Annotate RSE cut-off values'.

To indicate those cells in spreadsheets with a relative standard error of 25% or more, annotations have been applied prior to dissemination.

In addition, the tables below have been supplied to show estimates at which the relative standard error is 25%. Estimates of the size indicated in the tables, or smaller, are considered to be subject to sampling variability too high for most practical purposes.

Due to the January 2011 flooding in Queensland the relative standard errors for January 2011 will be higher than normal in some regions, therefore for Queensland the estimates at which the relative standard error is 25% will be higher than they appear in the tables below. However from February, the data returns to normal.

The new labour force sample was phased-in over four months from May to August 2013. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

The RSEs for July 2013 (50% old sample, 50% new sample) and onwards will be subject to revisions in the future, as more information is known about the new sample after it has been introduced.

Additional information on how standard errors for LFS estimates are produced is available in Labour Force Survey Standard Errors, Data Cube (cat. no. 6298.0.55.001).

State	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
<b>Employed</b>									
Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	5.9	3.1	3.7	2.5	2.2	1.1	1.3	0.9	5.5
Mar-03 — Oct-07	6.3	3.0	4.4	2.3	2.5	1.3	1.5	1.1	6.6
Nov-07	6.2	3.2	4.3	2.3	2.5	1.3	1.4	1.1	6.4
Dec-07	6.1	3.4	4.3	2.3	2.6	1.3	1.3	1.1	6.2
Jan-08	6.0	3.6	4.2	2.3	2.6	1.3	1.3	1.2	6.0
Feb-08	5.9	3.8	4.2	2.4	2.7	1.3	1.2	1.2	5.9
Mar-08	5.9	4.1	4.2	2.4	3.0	1.2	1.1	1.2	5.7
Apr-08	5.8	4.4	4.4	2.5	3.1	1.3	1.0	1.3	5.6
May-08	5.7	4.7	4.3	2.5	3.1	1.3	1.0	1.3	5.4
Jun-08	5.5	4.9	4.3	2.5	3.3	1.3	1.0	1.3	5.3
Jul-08 — Aug-09	6.9	6.1	5.3	3.1	4.0	1.5	1.2	1.6	7.4
Sep-09	6.5	5.8	5.0	2.9	3.8	1.5	1.1	1.5	7.0
Oct-09	6.1	5.5	4.7	2.8	3.6	1.4	1.0	1.4	6.5
Nov-09	5.8	5.2	4.5	2.6	3.4	1.3	1.0	1.4	6.2
Dec-09 — Jun-13	5.5	4.9	4.3	2.5	3.3	1.3	1.0	1.3	5.8

Jul-13 — Jan-14	7.7	3.8	5.5	2.7	3.8	1.4	0.3	1.7	7.8
Feb-14 onwards	7.9	3.9	5.6	2.7	3.8	1.4	0.3	1.7	7.9
<b>Unemployed</b>									
Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	5.7	5.7	4.5	2.6	3.3	1.3	3.2	1.4	4.9
Mar-03 — Oct-07	6.0	5.4	4.9	2.9	3.6	1.6	2.2	1.6	5.2
Nov-07	6.1	5.4	5.0	2.9	3.7	1.6	2.1	1.7	5.2
Dec-07	6.2	5.5	5.0	2.9	3.8	1.7	1.9	1.7	5.2
Jan-08	6.3	5.6	5.0	3.0	4.0	1.7	1.8	1.8	5.2
Feb-08	6.4	5.7	5.1	3.0	4.1	1.7	1.7	1.8	5.1
Mar-08	6.7	5.7	5.2	3.1	4.5	1.8	1.6	1.9	5.1
Apr-08	6.8	5.9	5.5	3.2	4.6	1.9	1.5	1.9	5.2
May-08	6.9	6.0	5.5	3.3	4.8	1.9	1.4	2.0	5.1
Jun-08	7.1	6.1	5.6	3.3	5.0	1.9	1.4	2.1	5.1
Jul-08 — Aug-09	9.3	8.0	7.4	4.4	6.6	2.5	1.8	2.8	7.3
Sep-09	8.7	7.5	6.8	4.1	6.1	2.4	1.6	2.5	6.8
Oct-09	8.1	7.0	6.4	3.8	5.7	2.2	1.5	2.4	6.4
Nov-09	7.5	6.5	6.0	3.5	5.3	2.1	1.5	2.2	6.0
Dec-09 — Jun-13	7.1	6.1	5.6	3.3	5.0	1.9	1.4	2.1	5.7
Jul-13 — Jan-14	7.3	6.6	8.4	3.7	5.8	1.7	1.3	2.2	7.1
Feb-14 onwards	7.4	6.7	8.6	3.8	5.9	1.8	1.3	2.3	7.3
<b>NILF</b>									
Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	6.4	3.7	4.1	3.2	2.7	1.2	1.4	1.1	6.0
Mar-03 — Oct-07	7.8	3.7	5.2	3.0	3.2	1.5	2.0	1.3	7.3
Nov-07	7.6	3.9	5.1	3.0	3.2	1.5	1.8	1.3	7.0
Dec-07	7.4	4.1	5.1	3.0	3.3	1.5	1.7	1.4	6.8
Jan-08	7.3	4.4	5.0	3.0	3.4	1.5	1.6	1.4	6.6
Feb-08	7.1	4.7	5.0	3.1	3.5	1.5	1.5	1.4	6.3
Mar-08	7.1	5.0	4.9	3.1	3.8	1.5	1.3	1.5	6.2
Apr-08	7.0	5.4	5.3	3.2	3.9	1.5	1.2	1.5	6.0
May-08	6.8	5.7	5.2	3.2	4.0	1.5	1.1	1.6	5.8
Jun-08	6.6	6.0	5.2	3.2	4.1	1.5	1.1	1.6	5.6
Jul-08 — Aug-09	8.3	7.6	6.5	4.0	5.2	1.8	1.4	2.0	8.0
Sep-09	7.8	7.2	6.1	3.7	4.9	1.7	1.3	1.9	7.4
Oct-09	7.3	6.7	5.8	3.5	4.6	1.6	1.2	1.8	6.9
Nov-09	6.9	6.4	5.4	3.3	4.4	1.6	1.2	1.7	6.5
Dec-09 — Jun-13	6.6	6.0	5.2	3.2	4.1	1.5	1.1	1.6	6.2
Jul-13 — Jan-14	8.4	4.4	9.8	3.6	4.5	1.8	0.7	2.5	9.0
Feb-14 onwards	8.5	4.5	9.9	3.7	4.6	1.8	0.8	2.5	9.1

Greater Capital City Statistical Areas	Feb-78 — Sep-82	Oct-82 — Aug-87	Sep-87 — Feb-89	Mar-89 — Aug-92	Sep-92 — Aug-97	Sep-97 — Sep-98	Oct-98 — Feb-03
Greater Sydney	4.5	4.0	4.5	4.5	5.3	5.7	5.8
Rest of NSW	4.5	4.0	4.5	4.5	5.3	5.7	5.8
Greater Melbourne	4.5	4.0	4.5	4.5	4.6	4.6	3.3
Rest of Victoria	4.5	4.0	4.5	4.5	4.6	4.3	3.2
Greater Brisbane	3.5	3.0	3.0	3.0	3.5	3.7	3.4
Rest of Queensland	3.5	3.0	3.0	3.0	3.6	4.3	3.6
Greater Adelaide	2.5	1.8	2.0	2.1	2.4	2.4	2.7
Rest of South Australia	2.5	1.8	2.0	2.1	2.5	2.2	2.5
Greater Perth	2.5	2.0	2.5	2.3	2.9	2.6	2.3
Rest of Western Australia	2.5	2.0	2.5	2.3	2.9	2.8	2.2
Greater Hobart	1.5	1.0	1.3	1.3	1.3	1.1	0.9
Rest of Tasmania	1.5	1.0	1.3	1.3	1.3	1.1	1.1
	Mar-03 — Feb-08	Mar-08 — Jun-08	Jul-08 — Oct-09	Nov-09 — Jun-13	Jul-13 — Jan-14	Feb-14 onwards	
Greater Sydney	6.5	5.7	7.1	5.7	7.6	7.7	
Rest of NSW	6.4	5.6	7.0	5.6	7.5	7.6	
Greater Melbourne	3.2	5.1	6.4	5.1	4.0	4.0	
Rest of Victoria	3.1	5.0	6.3	5.0	3.9	3.9	
Greater Brisbane	4.1	4.0	5.0	4.0	5.9	6.0	
Rest of Queensland	4.4	4.3	5.4	4.3	6.3	6.4	
Greater Adelaide	2.5	2.7	3.4	2.7	3.0	3.0	
Rest of South Australia	2.4	2.5	3.1	2.5	2.8	2.8	
Greater Perth	2.6	3.5	4.3	3.5	3.9	4.0	
Rest of Western Australia	2.5	3.3	4.1	3.3	3.7	3.8	
Greater Hobart	1.1	1.1	1.4	1.1	1.3	1.3	
Rest of Tasmania	1.3	1.3	1.6	1.3	1.5	1.5	
Statistical Area Level 4 Regions	Oct-98 — Feb-03	Mar-03 — Feb-08	Mar-08 — Jun-08	Jul-08 — Oct-09	Nov-09 — Jun-13	Jul-13 — Jan-14	Feb-14 onwards
Central Coast	7.4	8.5	7.2	9.4	7.2	10.2	10.4
Sydney - Baulkham Hills and Hawkesbury	7.2	8.3	7.0	9.2	7.0	10.0	10.2
Sydney - Blacktown	7.3	8.3	7.1	9.3	7.1	10.0	10.2
Sydney - City and Inner South	8.5	9.7	8.3	10.8	8.3	11.7	11.9
Sydney - Eastern Suburbs	9.6	11.0	9.3	12.2	9.3	13.1	13.4
Sydney - Inner South West	7.3	8.4	7.1	9.3	7.1	10.1	10.3
Sydney - Inner West	7.7	8.8	7.5	9.8	7.5	10.6	10.8
Sydney - North Sydney and Hornsby	7.6	8.6	7.3	9.6	7.3	10.4	10.6
Sydney - Northern Beaches	7.8	8.9	7.6	9.9	7.6	10.7	10.9
Sydney - Outer South West	7.3	8.4	7.1	9.3	7.1	10.1	10.3
Sydney - Outer West and Blue Mountains	7.3	8.3	7.1	9.3	7.1	10.0	10.2
Sydney - Parramatta	7.8	8.9	7.6	10.0	7.6	10.8	11.0

Sydney - Ryde	7.7	8.8	7.5	9.8	7.5	10.6	10.8
Sydney - South West	7.5	8.6	7.3	9.6	7.3	10.4	10.6
Sydney - Sutherland	7.4	8.4	7.2	9.4	7.2	10.1	10.3
Capital Region	7.2	8.2	7.0	9.2	7.0	9.9	10.1
Central West	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Coffs Harbour - Grafton	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Far West and Orana	7.4	8.4	7.2	9.4	7.2	10.1	10.3
Hunter Valley exc Newcastle	7.1	8.1	6.9	9.0	6.9	9.8	10.0
Illawarra	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Mid North Coast	7.5	8.6	7.3	9.6	7.3	10.3	10.6
Murray	7.6	8.6	7.4	9.6	7.4	10.4	10.6
New England and North West	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Newcastle and Lake Macquarie	7.1	8.1	6.9	9.0	6.9	9.8	9.9
Richmond - Tweed	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Riverina	7.6	8.6	7.4	9.6	7.4	10.4	10.6
Southern Highlands and Shoalhaven	9.0	10.3	8.7	11.4	8.7	12.3	12.6
Melbourne - Inner	4.1	3.9	7.2	9.4	7.2	5.2	5.3
Melbourne - Inner East	3.6	3.4	6.2	8.2	6.2	4.5	4.6
Melbourne - Inner South	3.7	3.5	6.4	8.4	6.4	4.7	4.8
Melbourne - North East	3.8	3.6	6.6	8.6	6.6	4.8	4.9
Melbourne - North West	3.7	3.6	6.5	8.6	6.5	4.7	4.8
Melbourne - Outer East	3.8	3.6	6.6	8.7	6.6	4.8	4.9
Melbourne - South East	3.6	3.4	6.3	8.3	6.3	4.6	4.7
Melbourne - West	3.5	3.4	6.1	8.1	6.1	4.4	4.5
Mornington Peninsula	3.6	3.5	6.4	8.3	6.4	4.6	4.7
Ballarat	4.0	3.8	6.9	9.1	6.9	5.0	5.1
Bendigo	3.8	3.7	6.7	8.8	6.7	4.9	5.0
Geelong	3.7	3.5	6.5	8.5	6.5	4.7	4.8
Hume	4.3	4.1	7.4	9.7	7.4	5.4	5.5
Latrobe - Gippsland	4.1	3.9	7.2	9.4	7.2	5.2	5.3
North West	3.9	3.7	6.8	8.9	6.8	4.9	5.0
Shepparton	4.3	4.1	7.4	9.7	7.4	5.4	5.5
Warrnambool and South West	3.7	3.5	6.5	8.5	6.5	4.7	4.8
Brisbane - East	4.1	5.1	5.1	6.7	5.1	8.1	8.2
Brisbane - North	4.1	5.2	5.1	6.7	5.1	8.1	8.3
Brisbane - South	4.2	5.2	5.2	6.8	5.2	8.2	8.4
Brisbane - West	4.1	5.2	5.1	6.7	5.1	8.2	8.3
Brisbane Inner City	4.2	5.3	5.3	6.9	5.3	8.4	8.6
Ipswich	4.0	5.0	5.0	6.5	5.0	7.9	8.1
Logan - Beaudesert	4.3	5.4	5.3	7.0	5.3	8.4	8.6
Moreton Bay - North	3.9	4.9	4.8	6.4	4.8	7.7	7.9
Moreton Bay - South	3.9	4.9	4.8	6.3	4.8	7.7	7.9
Cairns	4.9	6.2	6.1	8.0	6.1	9.7	9.9
Darling Downs - Maranoa	4.6	5.8	5.7	7.5	5.7	9.1	9.3
Fitzroy	4.2	5.3	5.2	6.9	5.2	8.3	8.5
Gold Coast	4.3	5.5	5.4	7.1	5.4	8.6	8.7
Mackay	4.2	5.3	5.2	6.9	5.2	8.3	8.5
Queensland - Outback	4.7	5.9	5.8	7.6	5.8	9.2	9.4
Sunshine Coast	4.3	5.4	5.3	7.0	5.3	8.5	8.7
Toowoomba	4.6	5.8	5.7	7.5	5.7	9.0	9.2
Townsville	4.7	5.9	5.8	7.6	5.8	9.2	9.4
Wide Bay	4.6	5.8	5.7	7.5	5.7	9.0	9.2
Adelaide - Central and Hills	3.3	3.1	3.3	4.3	3.3	3.7	3.8
Adelaide - North	3.3	3.0	3.3	4.3	3.3	3.7	3.8
Adelaide - South	3.4	3.1	3.4	4.4	3.4	3.8	3.9
Adelaide - West	3.7	3.4	3.7	4.8	3.7	4.1	4.2
Barossa - Yorke - Mid North	3.5	3.2	3.5	4.5	3.5	3.9	4.0
South Australia - Outback	3.7	3.4	3.7	4.8	3.7	4.1	4.2
South Australia - South East	3.1	2.8	3.1	4.0	3.1	3.5	3.5
Mandurah	2.4	2.8	4.0	5.2	4.0	4.6	4.7
Perth - Inner	3.1	3.5	4.9	6.5	4.9	5.8	5.9
Perth - North East	2.9	3.3	4.6	6.1	4.6	5.4	5.5
Perth - North West	2.8	3.2	4.5	5.9	4.5	5.2	5.3
Perth - South East	2.9	3.3	4.7	6.1	4.7	5.5	5.6
Perth - South West	2.7	3.1	4.3	5.7	4.3	5.0	5.1
Bunbury	2.4	2.8	4.0	5.2	4.0	4.6	4.7
Western Australia - Outback	2.8	3.3	4.6	6.0	4.6	5.4	5.5
Western Australia - Wheat Belt	2.6	3.0	4.2	5.5	4.2	4.9	5.0
Greater Hobart	0.9	1.1	1.1	1.4	1.1	1.3	1.3
Launceston and North East	1.3	1.5	1.5	1.9	1.5	1.7	1.8
Tasmania - South East	1.6	1.9	1.9	2.4	1.9	2.2	2.2
Tasmania - West and North West	1.3	1.6	1.6	2.0	1.6	1.8	1.8
Darwin	1.4	1.7	1.0	1.3	1.0	0.9	0.9
Northern Territory - Outback	1.4	1.7	1.0	1.3	1.0	0.9	0.9